

006733-02626560

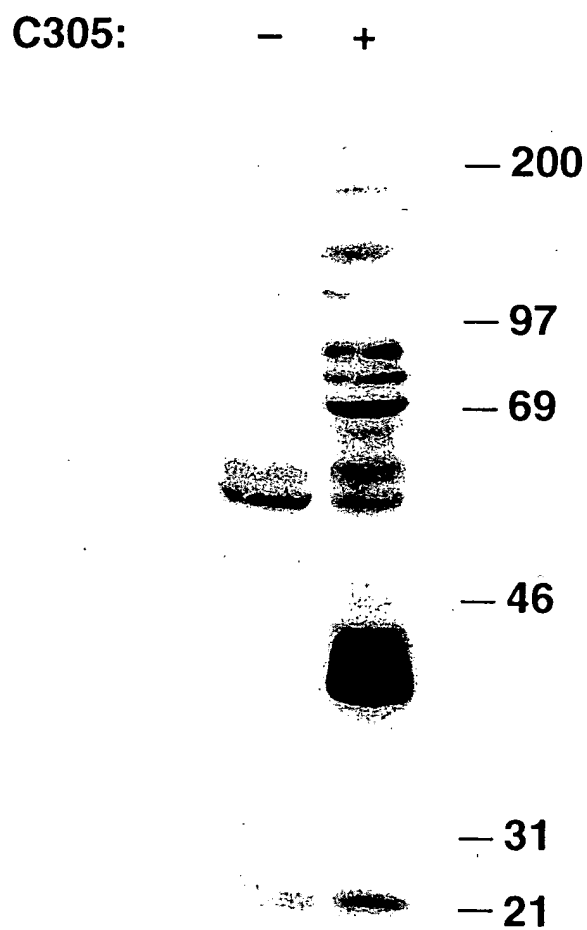


FIG. 1A

0057520-061900

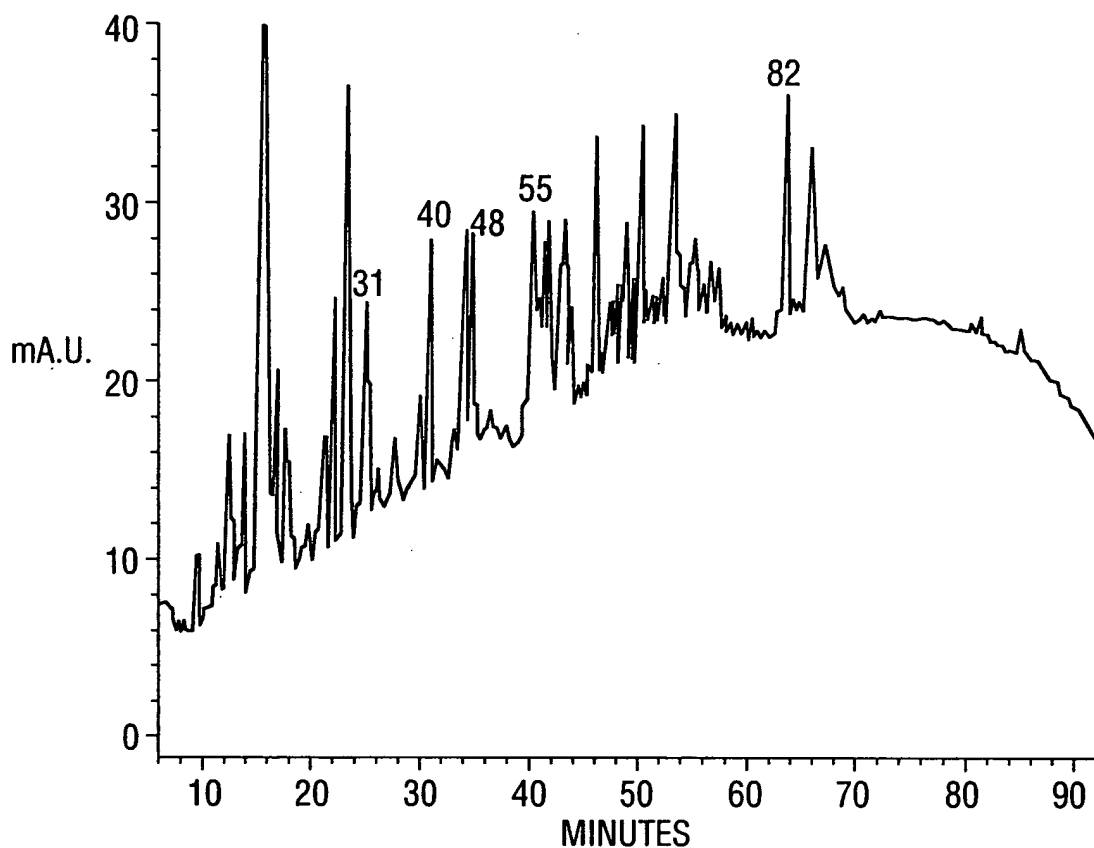


FIG. 1B

Expt	Peak	Mass	Sequence	Source
1	40	1721.9	x x v N V S Q E L H P x A A k	LAT
1	82	1840.0	S E V L G W D P D S L A D Y F K	SLP-76
2	31	n.d.	S I F T R	SLP-76
3	55	1334.8	n.d.	SLP-76
3	48	1743.3	L P G S Y D S T S S D S L Y P R	LAT
3	48	1641.6	x Y v N V	LAT

FIG. 1C

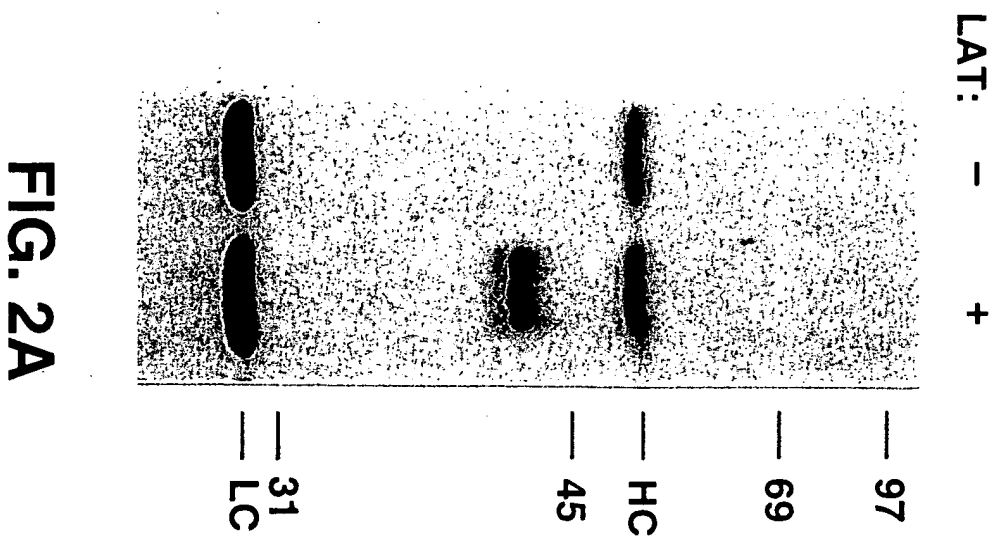


FIG. 2A

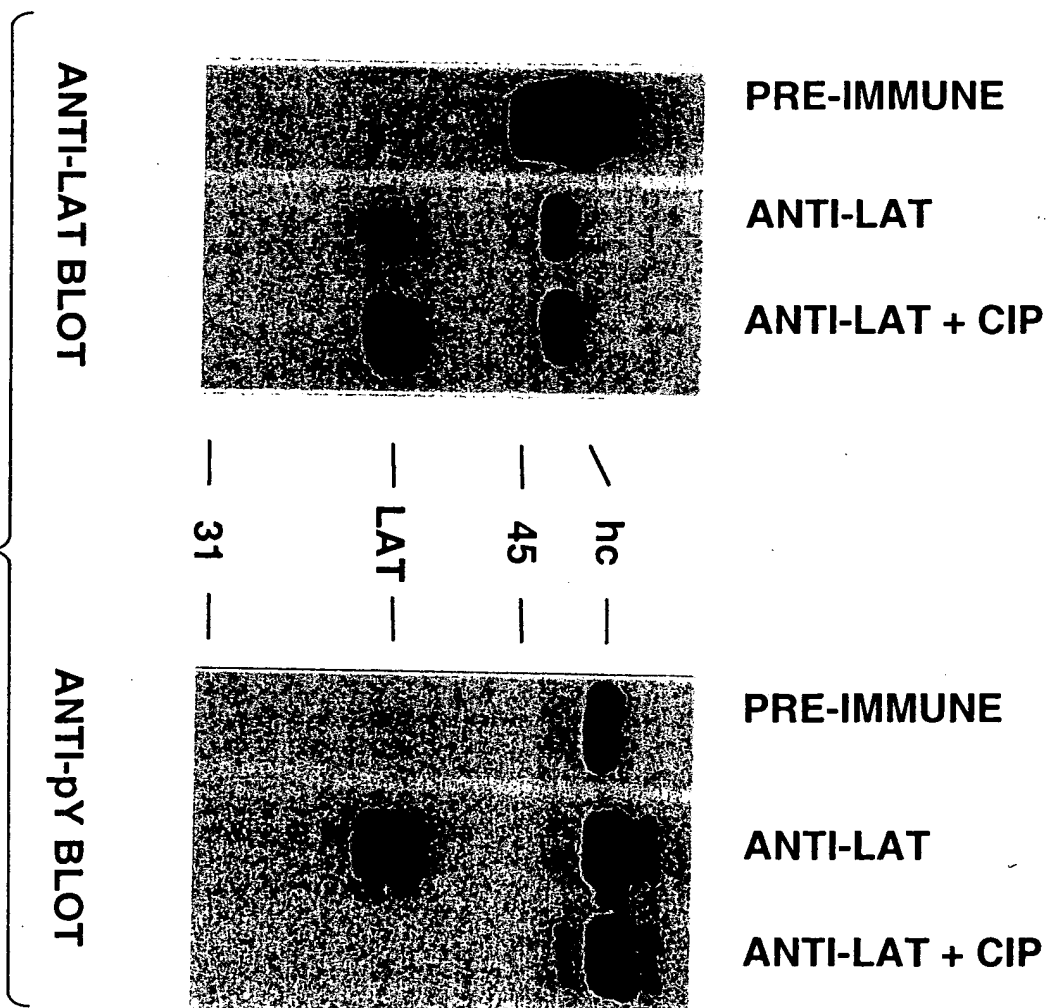


FIG. 2B

005F90 0264550

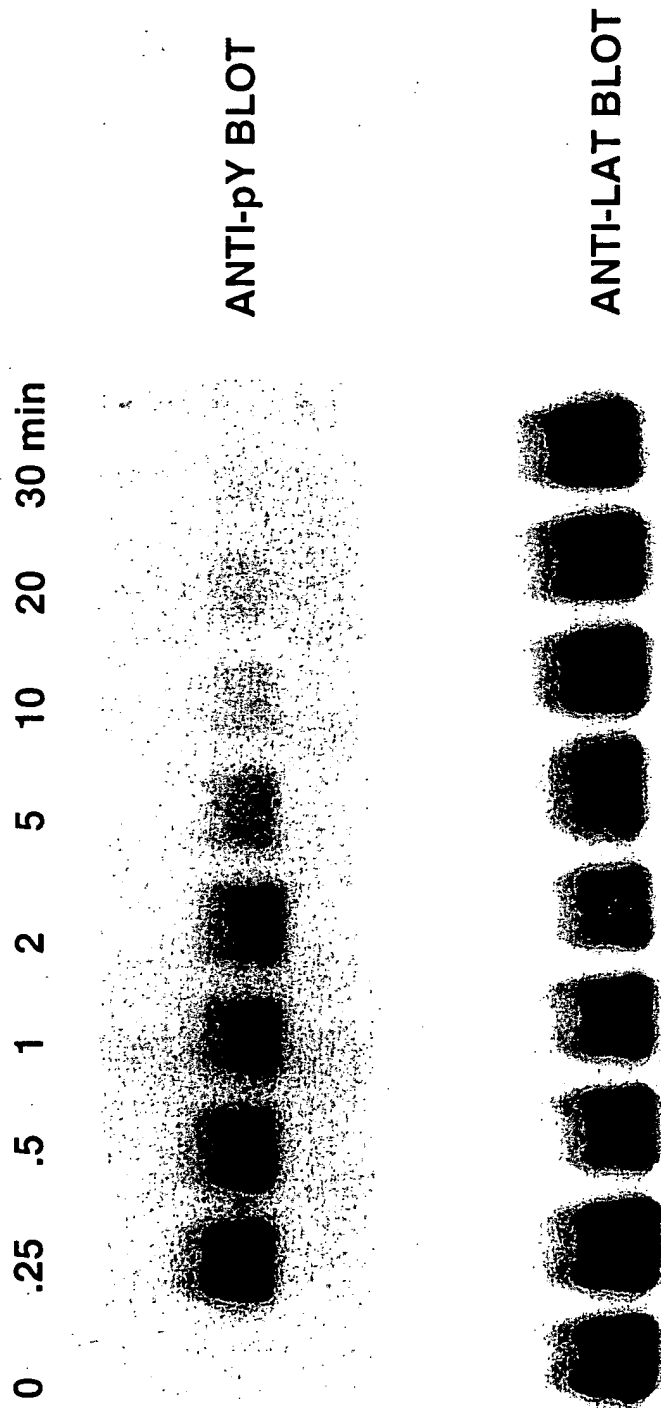


FIG. 2C

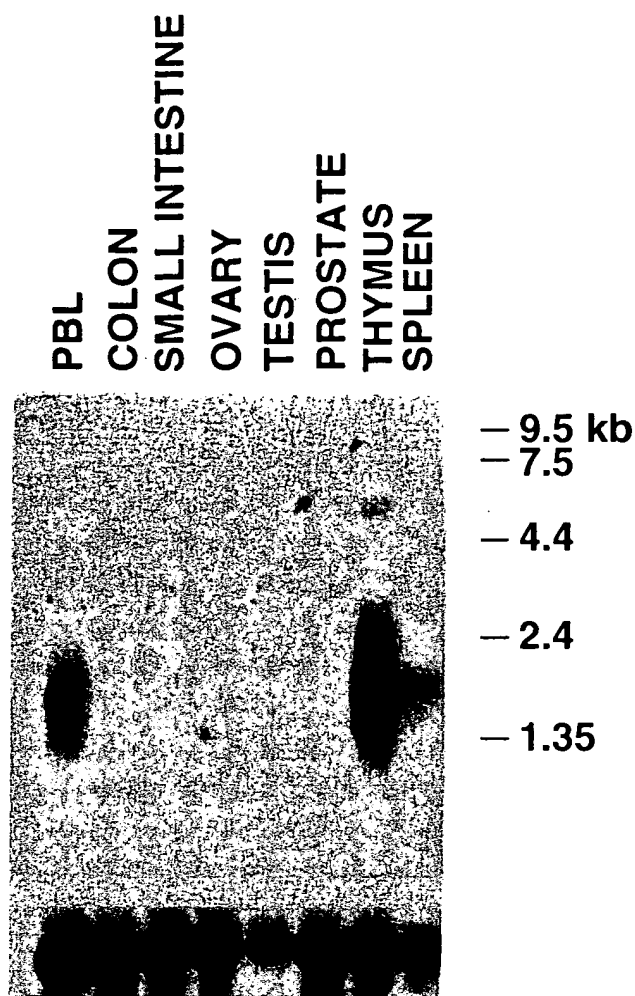


FIG. 3A

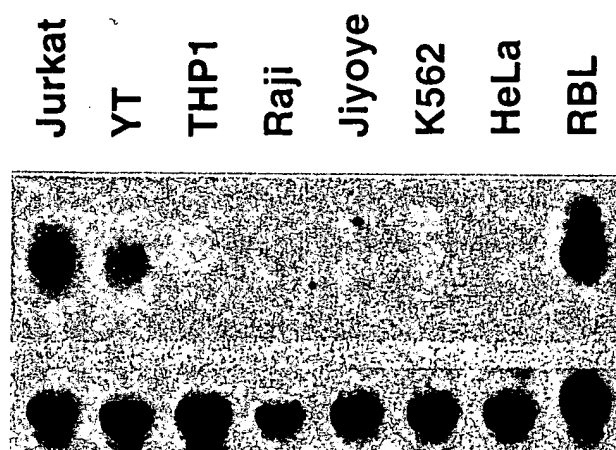


FIG. 3B

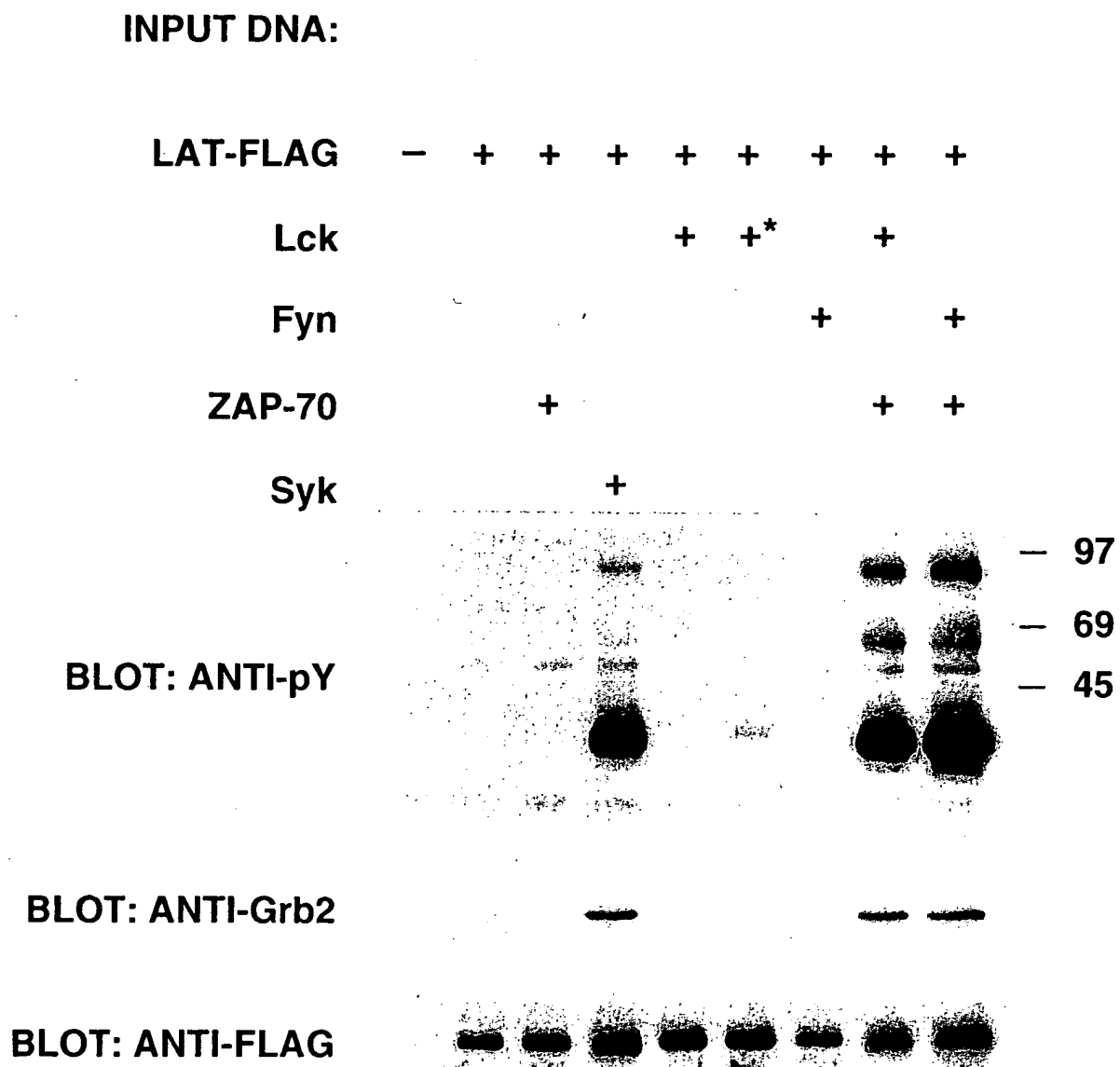
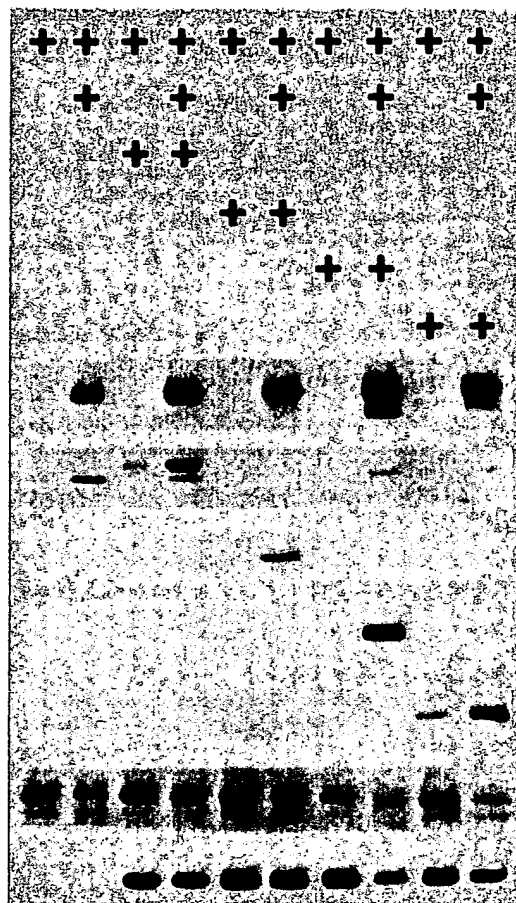


FIG. 4A

INPUT DNA:

LAT-FLAG
Lck + ZAP-70
Grb2-HA
Grap-myc
p85-HA
PLC- γ 1



BLOT:
ANTI-pY (LAT)
ANTI-Grb2
ANTI-myc (Grap)
ANTI-HA (p85)
ANTI-PLC- γ 1
ANTI-FLAG
Ab TO TEST
PROTEIN

Grb2
Grap
p85
PLC- γ 1

FIG. 4B

TRANSFECTION WITH Lck, ZAP-70 and LAT-FLAG PLUS:

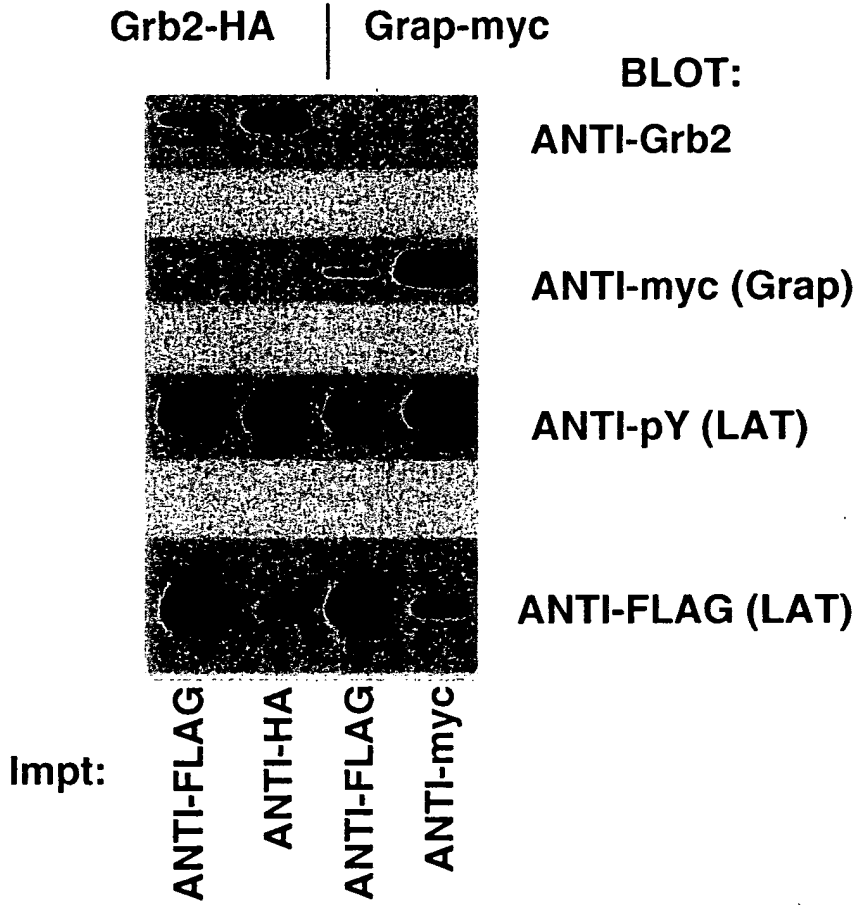


FIG. 4C

005730*0266560

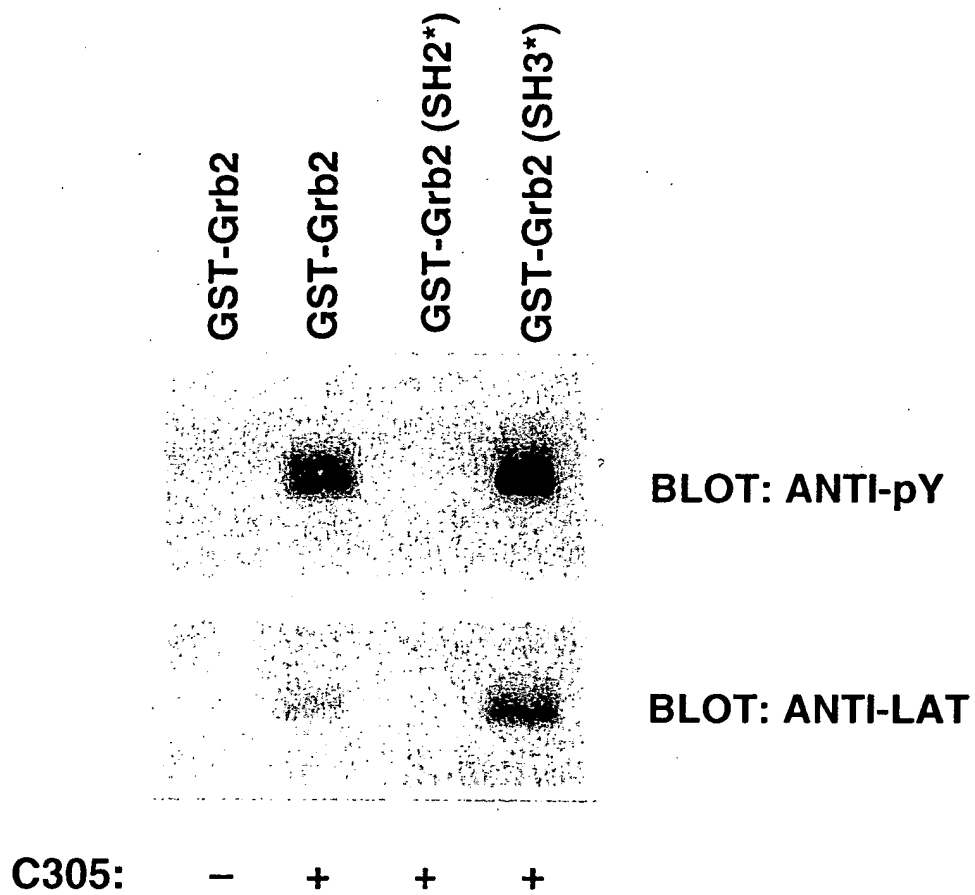
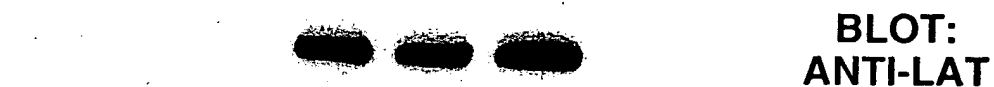
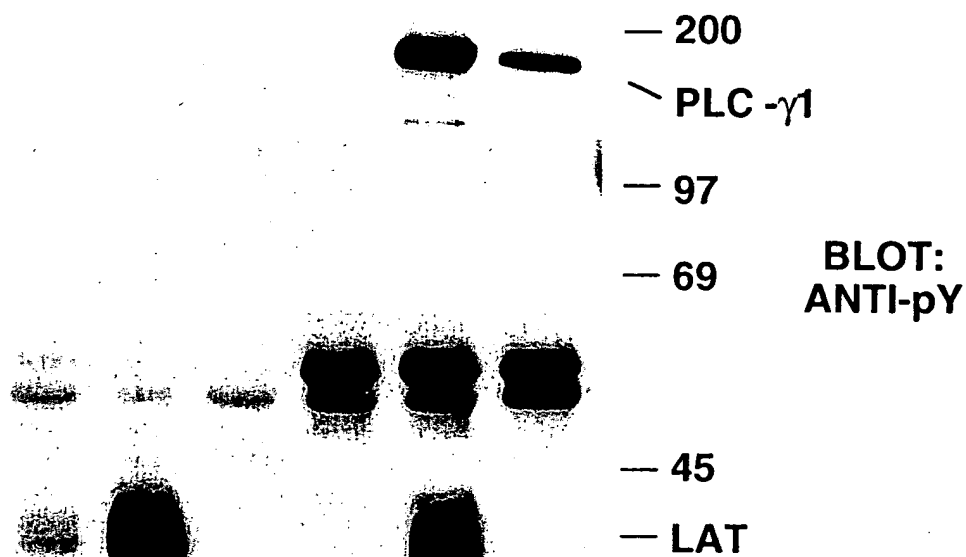


FIG. 5A

C305: - + + - + +



Impt: ANTI-Grb2 ANTI-PLC- γ 1

CIP: - - + - - +

FIG. 5B

006700-0254550

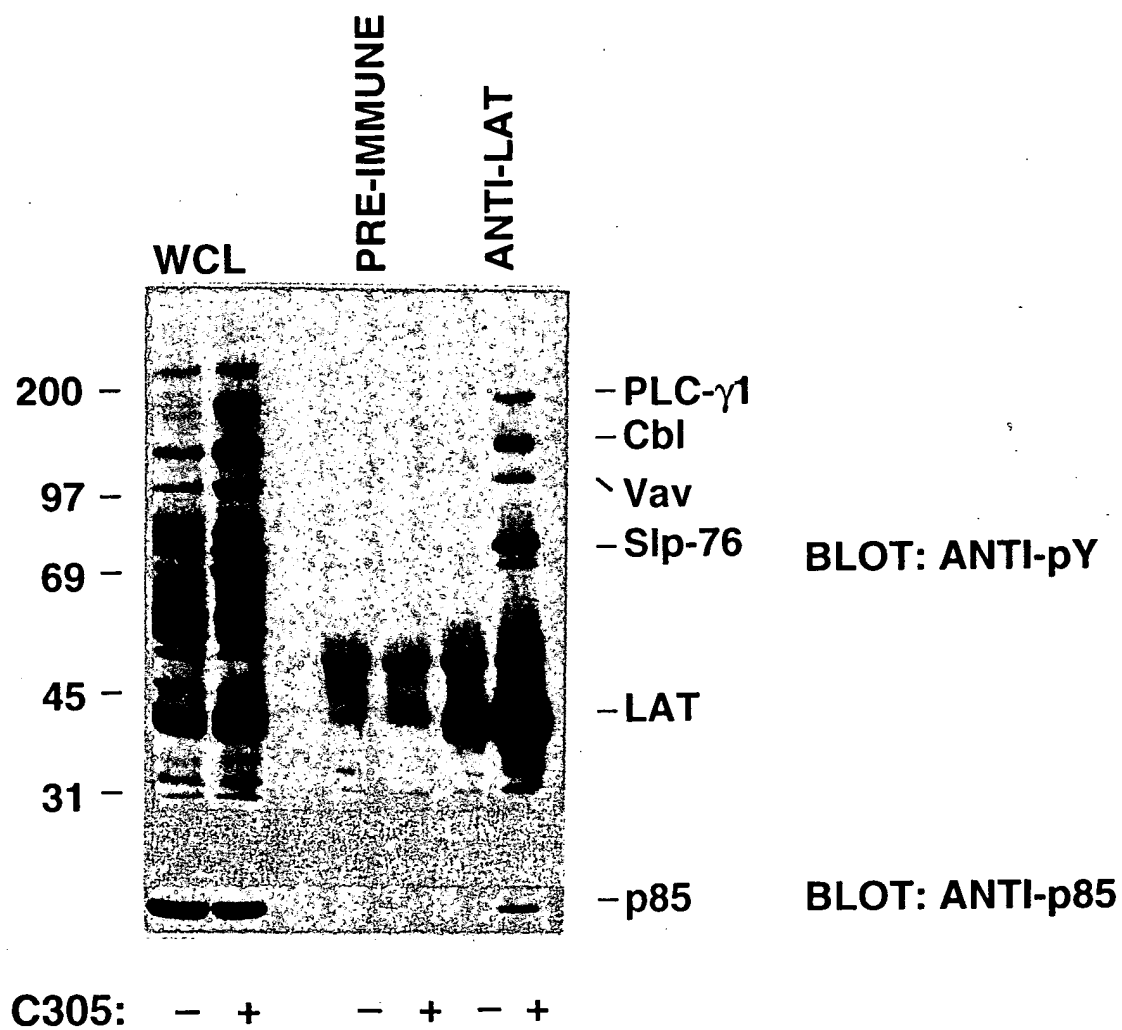


FIG. 5C

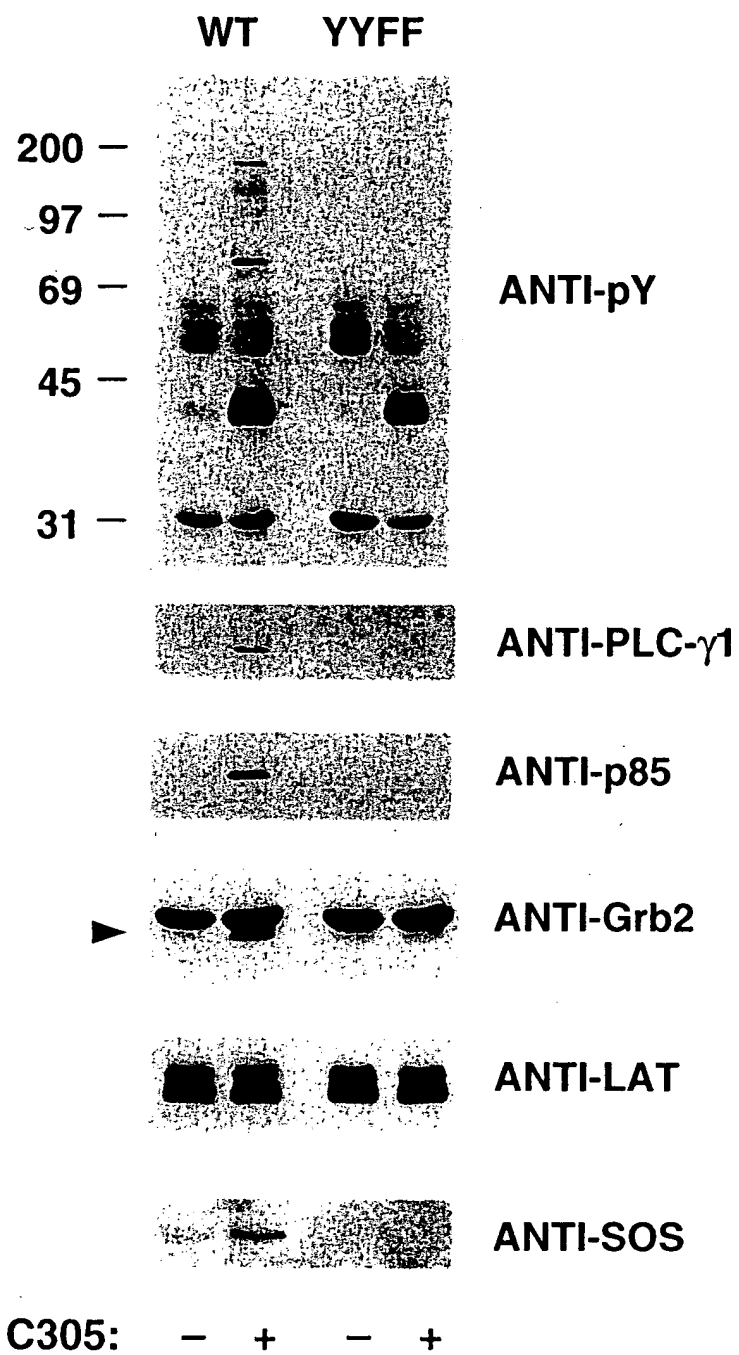


FIG. 6A

005130-0264660

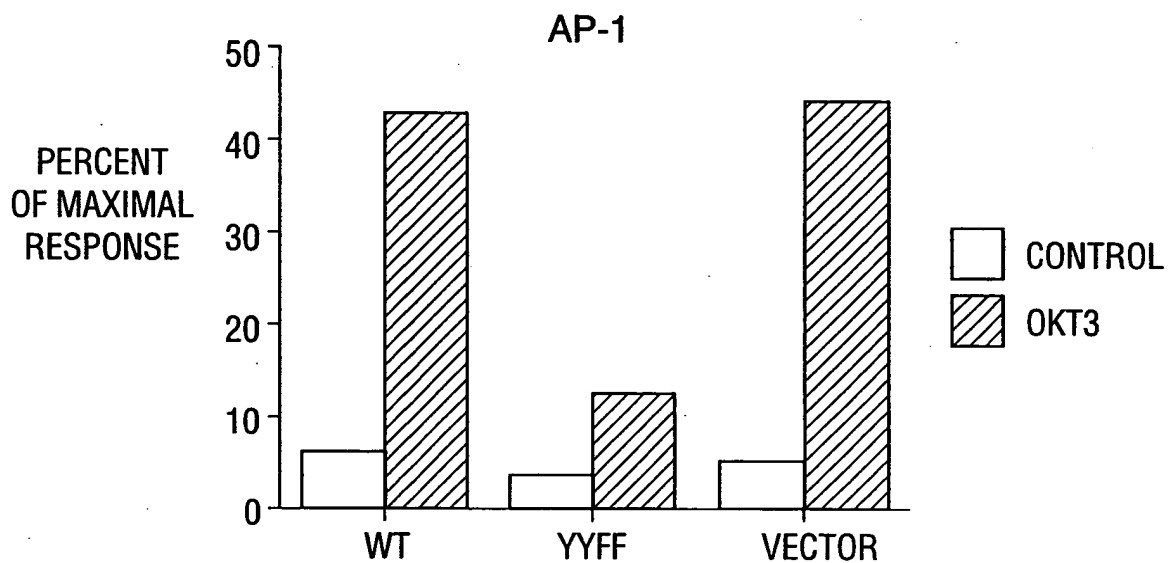


FIG. 6B

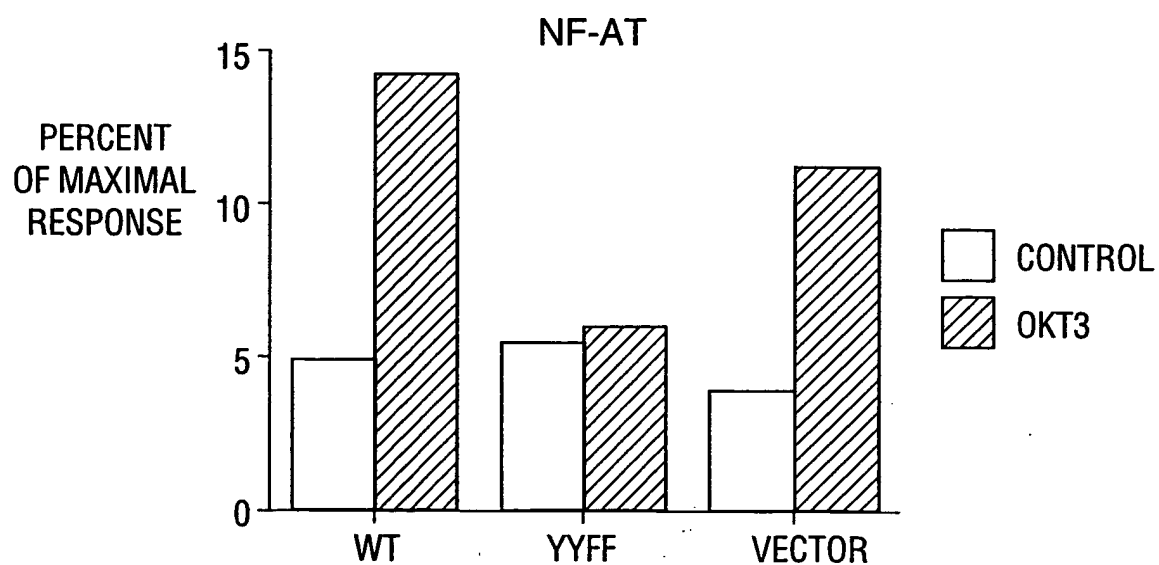


FIG. 6C

Human LAT Nucleotide Sequence (1-1060)

1 gactctgccc ttgaggggcc taggggtgca gccagcctgc tccgagctcc cctgcagatg
61 gaggaggcca tcttggcccc ctgcgtgctg gggctcctgc tgctgcccac cctggccatg
121 ttgatggcac tgtgtgtgca ctgccacaga ctgccaggct cctacgacag cacatcctca
181 gatagtgtgt atccaagggg catccagttc aaacggcctc acacggttgc cccctggcca
241 cctgcctacc cacctgtcac ctctaccca cccctgagcc agccagacct gctccccc
301 ccaagatccc cgcagccctt tgggggctcc caccggacgc catcttcccg gcgggattct
361 gatggtgcca acagtgtggc gagctacgag aacgaggaac cagcctgtga ggatgcagat
421 gaggatgagg acgactatca caaccaggc tacctgggtg tgcttctga cagcaccg
481 gccactagca ctgctgcccc atcagctcct gcactcagca cccctggcat ccgagacagt
541 gccttctcca tggagtccat tgatgattac gtgaacgttc cggagagcgg ggagagcgca
601 gaagcgtctc tggatggcag ccgggagtat gtgaatgtgt cccaggaact gcatcctgga
661 gcggctaaga ctgagcctgc cgccctgagt tcccaggagg cagaggaagt ggaggaagag
721 ggggctccag attacgagaa tctgcaggag ctgaactgag ggcctgtgga ggccgagtct
781 gtcttggaac caggcttgcc tgggacggct gagctgggca gctggaagtg gctctggggt
841 cctcacatgg cgtctgccc ttgctccage ctgacaacag cctgagaaat cccccgtaa
901 cttattatca ctttgggggt cggcctgtgt cccccgaacg ctctgcacct tctgacgcag
961 cctgagaatg acctgccctg gcccagccc tactctgtgt aatagaataa aggcctgcgt
1021 gtgtctgtgg aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa

Figure 7A

Human LAT Nucleotide Sequence (1-1460), [alternative splice variant]

1 accccaatctt catctggcct tgactctgcc cttagggggc ctagggggtc agccagcctg
61 ctccgagctc ccctgcagat ggaggaggcc atcctgggcc cctgcgtgct ggggctcctg
121 ctgctgcca tctggccat gttgatggca ctgtgtgtgc actgccacag actgccaggc
181 tctacgaca gcacatctc agatagttg tatccaagg gcatccagtt caaacggcct
241 cacacggttg cccctggcc acctgcctac ccacctgtca cctcctacc acccctgagc
301 cagccagacc tgctcccat cccaagatcc ccgcagcccc ttgggggtc ccaccggacg
361 ccatcttccc ggcgggattc tgatggtgcc aacagtgtgg cgagctacga gaacgagggt
421 gcgtctggga tccgagggtc ccaggctggg tggggagtct ggggtccgtc ctggactagg
481 ctgacccctg tgcgttacc ccagaacca gcctgtgagg atgcagatga ggatgaggac
541 gactatcaca acccaggcta cctggtggtg ctctctgaca gacccccgc cactagcact
601 gctgccccat cagctcctgc actcagcacc cctggcatcc gagacagtgc ctctccatg
661 gattccattg atgattacgt gaacgttccg gagagcgggg agagcgcaga agcgtctctg
721 gatggcagcc gggagtatgt gaatgtgtcc caggaaactgc atcctggagc ggctaagact
781 gagcctgccg ccctgagttc ccaggaggca gaggaagtgg aggaagaggg ggctccagat
841 tacgagaatc tgcaggagct gaactgaggg cctgtggagg ccgagctgt cctggaacca
901 ggcttgccctg ggacggctga gctgggcagc tggaaagtggc tctgggggtc tcacatggcg
961 tctgcccctt gctccagcct gacaacagcc tgagaaatcc ccccgtaact tattatcact
1021 ttgggggttcg gcctgtgtcc cccgaacgct ctgcaccttc tgacgcagcc tgagaatgac
1081 ctgccctggc ccagcccta ctctgtgtaa tagaataaag gcctgcgtgt gtctgtgttg
1141 agcgtgcgtc tgtgtgtgcc tgtgtgcgag tctgagtcag agatttgag atgtctctgt
1201 gtgtttgtgt gtatctgtgg gtcctcatcc tccatggggg ctgagccagg tgctgtgaca
1261 ccccccttct gaatgaagcc ttctgacctg ggctggcact gctgggggtg aggacacatt
1321 gccccatgag acagtccag aacacggcag ctgctggctg tgacaatgtt ttaccatcc
1381 ttagaccaag ggatgggacc tgatgacctg ggaggactct ttagtctt accctttgtg
1441 gttctcaata aaacagaacg

Figure 7B

Murine LAT Nucleotide Sequence (1-1260)

1 ggcacgagca ggcggggagc aagaaagggg caggtacagc tgggcacggg gatcgtgcag
61 ctggtagctg gggcacgggc cccagctctg gctctggggc gagcaccttt ccagagccaa
121 cactgctctc aactcagtc agcaagagag gggagccatc cagccccgaa aggatacggc
181 tgcctactgc cgggcggatc ccaggctgga gcccgccttg tcccatacc ctcctgccac
241 tctgtctcga ggggctgcag tgcagcaggg cctgtggcag gtgctctgca gatggaagca
301 gacgcctga gcccggtggt gctgggctc ctcctgtgc cctcttggt cagcctcctg
361 gctgccctgt gctgtcgtg ccgtgagttg ccagctcct atgacagcac ttccacagag
421 agtttgtagc caagaagcat cctcatcaag ccacctcaa taaccgtccc ccgaacacct
481 gctgtttcct accctctagt cacttccttc ccacctga ggcagccaga cctgtccccc
541 atcccgagat cccacagcc ccttgggggt tccatcgga tgcctcttc ccagcagaat
601 tcagatgatg ccaacagtgt ggcaagctac gagaaccagg agccagcctg taagaatgtg
661 gatgcagatg aggatgaaga cgactatccc aacggctacc tagtggtgct gcctgacagt
721 agtctgtg ccttccctgt tctctcctt gctcctgtgc ctagcaacct tgaccttgga
781 gacagtgcct tctctgtgga gtcgtgtgaa gattacgtga atgttctga gagtgaggag
841 agcgcagagg cgtctctgga tgggagccgg gattatgta atgttcccc agagcagcag
901 ccagtaccca gggctgagct ggctctgtg aactcccagg aggtggaaga cgaaggagaa
961 gaggaagggg tggatggaga ggaagctccc gactatgaga atctacagga gcttaactga
1021 aagcctactg cagctgtctg tctgaaact ggacttctg ggggtctgct aagaggatcc
1081 catttgatct ctgccttgcc acagcctgag aatcttcccc taacttattg tcactttggg
1141 gtccagtctg tgtccccaat attctgtacc ttctgataaa gcctgagaat gaatctggt
1201 ccagccagac catgtcatgg aataaaggcc atgtgacata aaaaaaaaaa aaaaaaaaaa

Figure 7C

FIG. 7D

1 ggaatagggt agtttcagac aagcctgctt gccggagctc agcagacacc aggccttccg
 61 ggcaggcctg gccaccgtg ggccacagag ctgctgctgg ggcaacaga accggctctc
 121 cattggcatt gggaccagag accccgcaag tggcctgttt gcctggacat ccacctgtac
 181 gtccccaggt ttggggaggc ccaggggcca tgcagaccc cgcggcgac ctgcccttct
 241 tctacggcag catctgcgt gccgaggccg aggagcacct gaagctggcg ggcattggcg
 301 acgggctctt cctgctgcgc cagtgcctgc gctcgtggg cggctatgtg ctgctgctg
 361 tgcacgatgt gcgttccac cacttccca tgcagcgcca gctcaacggc acctacgcca
 421 ttgccggcgg caaagcgac tgtggaccgg cagagctctg cgagttctac tgcgcgacc
 481 ccgacgggct gccctgcaac ctgcgcaagc cgtgcaaccg gccgtcgggc ctgagcccg
 541 agccgggggt ctgcactgc ctgcgagacg ccatgggtgc tgactacgtg cgccagacgt
 601 ggaagctgga gggcgaggcc ctggagcagg ccatcatcag ccaggccccg caggtggaga
 661 agtcattgc tacgacggcc cagagcgga tgccttgta ccacagcagc ctgacgcgtg
 721 aggaggccga gcgcaactt tactctgggg cgcagaccga cggcaagttc ctgctgaggc
 781 cgcggaagga gcagggcaca tacgccctgt cctcatcta tgggaagacg gtgtaccact
 841 acctcatcag ccaagacaag gcgggcaagt actgcattcc cgagggcacc aagtttgaca
 901 cgctctggca gctggtggag tatctgaagc tgaaggcgga cgggctcacc tactgcctga
 961 aggaggcctg ccccaacagc agtgccagca acgcctcagg ggctgctgt cccacactcc
 1021 cagccacccc atccacgtt atcatctc agagacgaat cgacaccctc aactcagatg
 1081 gatacacccc tgagccagca cgcataacgt cccagacaa accgcggccg atgccatgg
 1141 acacgagcgt gtatgagagc ccctacagcg acccagagga gctcaaggac aagaagctct
 1201 tctgaagcg cgataacctc ctcatagctg acattgaact tggctcggc aactttggct
 1261 cagtgcgcca gggcgtgtac cgcattgcga agaagcagat cgactggcc atcaaggtgc
 1321 tgaagcaggg caggagaag gcagacacgg aagagatgat gcgcgaggcg cagatcatg
 1381 accagctgga caaccctac atcgtcggc tcatggcgt ctgccaggcc gaggcctca
 1441 tgctggtcat ggagatggct gggggcgggc cgctgcacaa gttcctggc ggcaagaggg
 1501 aggagatccc tgtgagcaat gtggccgagc tgcgcacca ggtgtccatg gggatgaagt
 1561 acctggagga gaagaactt gtgcaccgtg acctggcggc ccgcaacgtc ctgctggtta
 1621 accggcacta cgcaagatc agcgactttg gcctctcaa agcactgggt gccgacgaca
 1681 gtactacac tgcgcgtca gcagggaagt ggccgctcaa gtggtacgca cccgaatgca
 1741 tcaactccg caagtctcc agccgacgc atgtctggag ctatggggtc accatgtggg
 1801 aggcctgtc ctacggccag aagccctaca agaagatgaa agggccggag gtcattggct
 1861 tcatcgagca gggcaagcgg atggagtgc caccagagt tccacccgaa ctgtacgcac
 1921 tcatgagtga ctgctggatc tacaagtggg aggatcgccc cgacttctg accgtggagc
 1981 agcgcatgc agcctgttac tacagcctgg ccagcaaggt ggaagggccc ccaggcagca
 2041 cacagaagcg tgaggctgcc tgtcctgag ctccgctgc ccaggggagc cctccacgcc
 2101 ggctctccc caccctcagc cccacccag gtcctgcagt ctggctgagc cctgcttgg
 2161 tctctccaca cacagctggg ctgtggtagg ggtgtctca ggccacaccg gccttgcat
 2221 gctgcttg cccctgtcc tcttggtg gggagcaggg aggtccggga ggtgctggct
 2281 gtgcagcctg tctgggctg gtgctccc gagggccctg agctgagggc attgcttaca
 2341 cggatgcctt cccctgggcc ctgacattgg agcctgggca tctcaggtg gtcaggcgta
 2401 gatcaccaga ataaaccag ctccctctt gaaaaaaaa aaaaaaaaa aacc

Human ZAP-70 Nucleotide Sequence (1-2454)

Figure 8A

005790.00560

1 mpdpaahlpf fygsisraea eehklagma dglflrqcl rslggyvls vddvrfhhfp
61 ierqlngtya iaggkahcgp aelcqfysqd pdglpcnlm acnrppglep qpgvfdclrd
121 amvrdivrqt wklegdaleq aiisqapqve kliattaher mpwyhssltr eeaerklysg
181 qqtgkflr prkeqgtyal slvygktyh ylisqdkagk ycipegtkfd tlwqlveyk
241 lkadgliyrl kevcpnssas aavaaptlpa hpstftqqr rvdtnsdgy tpeparlass
301 tdkprmpmd tsyespysd peelkdkklf lkrenllvad ielgcgnfgs vrqgvymrk
361 kqidvaikvl kqgtekadkd emmreaqimh qldnpyivrl igvcqaealm lvmemagggp
421 lkhflgkke ipvsnaell hqvamgmky l eeknfvhrl aarnvllvr hyakisdfgl
481 skalgadds y tarsagkwp lkwyapecin frkfssrsdv wsygvtnwea fsygqkpykk
541 mkgpevlfdi kqgkrmecpp ecppemyalm sdcwiykwed rpdfltveqr mrnyyyslas
601 raegppqceq vaeaacg

Human ZAP-70 Amino Acid Sequence (1-617)

Figure 8B

1 gaggaagagc cgcgggcccc gcggctgagg ccacccggc ggcggtgga gagcgaggag
 61 gagcgggtgg ccccgcgctg cgcccgccct cgcctcacct ggcgaggtg gacacctgcg
 121 cagggtgtgt cctccggcc cctgaagcat ggccagcagc ggcatggctg acagcgccaa
 181 ccacctgccc ttcttttcg gcaacatcac ccgggaggag gcagaagatt acctggicca
 241 ggggggcatg agttaggggc ttatttgct gcgcagagc cgcaactacc tgggtggctt
 301 cgccctgtcc gtggcccacg ggaggaaggc acaccactac accatcgagc gggagctgaa
 361 tggcacctac gccatgcgcg gtggcaggac ccatgccagc cccgccgacc tctgccacta
 421 ccactcccag gactctgatg gcctgtctg cctcctcaag aagcccttca accggcccca
 481 aggggtgcag cccaagactg ggcccttga ggattgaag gaaaacctca tcagggaata
 541 tgtgaagcag acatggaacc tgcagggtca ggctctggag caggccatca tcagtcagaa
 601 gcctcagctg gagaagctga tgcctaccac agcccatgaa aaaatgcctt ggttccatgg
 661 aaaaatctct cgggaagaat ctgagcaaat tgcctgata ggatcaaaga caaatggaaa
 721 gtctctgac cgagccagag acaacaacgg ctctacgcc ctgtgcctgc tgcacgaagg
 781 gaaggtgtct cactatcgca tcgacaaaga caagacaggg aagctctcca tccccagggg
 841 aaagaagttc gacacgctct ggcagctagt cgagcattat tctataaag cagatggtt
 901 gtaagagti cttactgtcc catgtcaaaa aatcggcaca cagggaatg ttaattttg
 961 aggccgtcca caactccag gtccccatcc tgcgtcctcc cctgcccaag ggaaccggca
 1021 agagagtact gtgtcattca atccgtatga gccagaactt gcaccctggg ctgcagacaa
 1081 agggcccccag agagaagccc tacctatgga cacagaggtg tacgagagcc cctacgcgga
 1141 ccccgaggag atcaggccca aggagggtta cctggaccga aagctgctga cgctggaaga
 1201 caaagaactg ggctctggta attttggaac tgtgaaaaag ggctactacc aaatgaaaaa
 1261 agtttgaaa accgtggctg taaaataact gaaaacagag gccaatgacc ccgtcttaa
 1321 agatgagtta ttgcagaag caaatgtcat gcagcagctg gacaaccgt acatcgtgcg
 1381 gatgatcggg atatgcgagg ccgagtcctg gatgctggtt atggagatgg cagaactgg
 1441 tcccccaat aagtatttgc agcagaacag acatgtcaag gataagaaca tcatagaact
 1501 ggttcatcag gtttccatgg gcatgaagta ctggaggag agcaattttg tgcacagaga
 1561 tctggctgca agaatgtgt tgcagttac ccaacattac gccaatgca gtgatttcgg
 1621 actttccaaa gcactgcgtg ctgatgaaaa ctactacaag gccagaccc atggaaagt
 1681 gcctgtcaag tggtagctc cggaatgcat caactactac aagtttcca gcaaaagcga
 1741 tgtctggagc ttggagtgt tgatgtggga agcattctcc tatgggcaga agccatatc
 1801 agggatgaaa ggaagtgaag tcaccgtat gtagagaaa ggagagcgga tgggtgccc
 1861 tgcagggtgt ccaagagaga tgcagatct catgaatctg tctggacat acgatgtga
 1921 aaacaggccc ggattcgag cagtgaact gcggctgcgc aattactact atgacgtggt
 1981 gaactaacg ctcccgacc tgcgggtgc tgcctttgat cacaggagca atcacaggaa
 2041 aatgtatcca gaggaattga ttgcagcca cctccctctg ccagtcggga gagccaggct
 2101 tggatggaac atgccacaa ctgtcaccc aaagcctgtc ccaggactca cctccacaa
 2161 agcaaaggca gtcccggag aaaagacgga tggcaggatc caaggggcta gctggatttg
 2221 ttgtttct tctctgtgt atttcatac aggtatttt tacgatctgt ttccaaatcc
 2281 ctctcatgtc ttccacttc tctgggtccc ggggtgcatt tgttactcat cgggccagg
 2341 gacattgcag agtggcctag agcacttca cccaagcgg ccttttcaa atgcccagg
 2401 atgccttagc atgtgactcc tgaagggaag gcaaaggcag aggaatttgg ctgcttctac
 2461 ggccatgaga ctgatccctg gccactgaaa agctttctg acaataaaaa tgtttgagg
 2521 ctttaaaaa aaaaaaaaaa a

Human Syk Kinase Nucleotide Sequence (1-2541)

Figure 9A

00597920.061900

1 massgmadsa nhlpfffgni treeaedlyv qggmsdglyl lrqsrnylgg falsvahgrk
61 ahhytierel ngtyaiaggr thaspdlch yhsqesdglv cllkpfnrp qgvqpktgpf
121 edlkenlire yvkqtnlqg qaleqaiisq kpqlekliat tahekmwfh gkisreeseq
181 ivligsktng kflirardnn gsyalcille gkvlyhrydk dktgklsipe gkkfdtlwql
241 vehysykadg llrvltvpcq kigtqgnvnf ggrpqlpgsh passpaqgnr qestvsfnpy
301 epelapwaad kgpqrealpm dtevyespya dpeeirpkev yldrklitle dkelgsgnfg
361 tvkkgyyqmk kvvktvavki lkneandpal kdellaeav mqqldnpyiv rmigiceaes
421 wmlvmemael gpinkylqn rhvkdniie lvhqvsimgmk ylesnfvhr dlaarnvllv
481 tqhyakisdf glskalrade nyykaqthgk wpvkwyapc inyykfssks dvwsfgvlmw
541 eafsygqkpy rgmkgsevt mlekgermgc pagcpremyd lnnlcwtydv enrpgfaave
601 lrlmnyydv vn

Human Syk Kinase Amino Acid Sequence (1-612)

Figure 9B

005790"02676560

1 gccagtgat tggggggtc agccctctc cctccctcc cctgcttca ggcgtctgag
61 cactgagcag cgctcagaat ggaagccatc gccaaatatg acttcaaagc tactgcagac
121 gacgagctga gcttcaaaag gggggacatc ctcaagggtt tgaacgaaga atgtgatcag
181 aactggtaca aggcagagct taatggaaaa gacggcttca ttccaagaa ctacatagaa
241 atgaaaccac atccgtggtt ttttgcaaa atccccagag ccaaggcaga agaaatgctt
301 agcaaaccagc ggcacgatgg ggcctttctt atccgagaga gtgagagcgc tcttggggac
361 ttctccctct ctgtcaagtt tggaaacgat gtgcagcact tcaagggtct ccgagatgga
421 gccgggaagt acttctctg ggtggtgaag ttcaattctt tgaatgagct ggtggattat
481 cacagatcta catctgtctc cagaaaccag cagatatctc tgcgggacat agaacagggtg
541 ccacagcagc cgacatacgt ccaggccctc ttgactttg atccccagga ggatggagag
601 ctgggcttcc gccggggaga tttatccat gtcattgata actcagaccc caactggtgg
661 aaaggagctt gccacgggca gaccggcatg ttccccgca attatgtcac ccccgatgaac
721 cggaacgtct aagagtcaag aagcaattat ttaaagaaag tgaaaaatgt aaaacacata
781 caaaagaatt aaaccacaa gctgcctctg acagcagcct gtgaggaggat gcagaacacc
841 tggccgggtc accctgtgac cctctcactt tggttggaac tttagggggg gggagggggc
901 gtggattta aaaatgccaa aacttaccta taaattaaga agagttttta ttacaaatti
961 tcactgtgc tctctttcc cctcctttgt cttttttc atccttttt ctctctgtc
1021 catcagtga tgacgtttaa ggccacgtat agtcctagct gacgccaata ataaaaaca
1081 agaaacccaa aaaaaaaaaac ccgaattca

Human Grb Nucleotide Sequence (1-1109)

Figure 10A

1 meaiakydfk ataddelsfk rgdilkvlne ecdqnwykae lngkdgfipk nyiemkphpw
61 ffgkipraka eemlskqrhd gaflireses apgdfslsvk fgndvqhfkv lrdgagkyfl
121 wvfkfnsln lvdylhrstsv smqqiflrd ieqvpqqpty vqaldfddpq edgelgfrg
181 dfihvmdnsd pnwwkgachg qtgmfpmyv tpvnrnv

005790 0264650

Human Grb Amino Acid Sequence (1-217)

Figure 10B

1 ctaggcttiti gcaaaaagct tcacgtgcc gcaagcatic agggcgcaag ggctgctaaa
 61 ggaagcggaa cacgtagaaa gccagtccgc agaaacgggtg ctgaccccg atgaatgtca
 121 gctactgggc tatctggaca agggaaaacg caagcgcaaa gagaaagcag ttctgtgcc
 181 ttaagaacat tagaaccttc ctgtccacct gctgtgagaa gticggcctc aagcggagcg
 241 agccttcga agcctttgac ctcttcgatg tgcaggattt tggcaagggtc atctacccc
 301 tgtctgctct gtctggacc ccatcgccc agaacagggg gatcatgccc tccccaccg
 361 aggaggagag ttaggtgat gaagacatct acagtggcct gtccgaccag atcgacgaca
 421 cgggtggagg gtagaggac ctgtatgact gcgtggagaa tgaggaggcg gaaggcgacg
 481 agatctatga ggacctatg cgtcggagc cgtgtccat gccgccaag atgacagagt
 541 atgacaagcg ctgctgtgc ctgcgggaga tccagcagac ggaggagaag tacactgaca
 601 cgtgggctc catccagcag cattcttga agccccgca acggttctg aaacctcaag
 661 acattgagat catcttacc aacattgagg acctgcttcg tgtcatact cacttctaa
 721 aggagatgaa ggaagccctg ggcaccctg gcgcaccgaa tctctaccag gtcttcatca
 781 aatacaagga gaggttctc gtctatggc gctactgcag ccagggtggag tcagccagca
 841 aacacctgga ccgtgtggc gcagcccgagg aggcgtgca gatgaagctg gaggaatgtt
 901 ctcagagagc caacaacggg aggttactg cgcgacctg tcatggtgcc tatgcagcga
 961 gtctcaaat atcacctct tctccaggag ctggtgaaac acacgcagga ggcgatggag
 1021 caaggaaact gcggctggc ctggatgcca tgagggacct ggctcagtgc gtgaacgagg
 1081 tcaagcgaga caacgagaca ctgcgacaga tccaattt ccagctgtcc attgagaacc
 1141 tggaccagtc tctggctac tatggccggc ccaagatcga cggggaaact aagatcacct
 1201 cgggtggaac gcgtccaa atggacaggt atgcttct gctcgacaaa gctctactca
 1261 tctgtaagcg caggggagac tctatgacc tcaaggactt tgtaaacctg cacagcttcc
 1321 aggttcggga tgactctca ggagaccgag acaacaagaa gtggagccac atgttctcc
 1381 tgatcgagga ccaaggtgcc cagggctatg agctgttctt caagacaaga gaattgaaga
 1441 agaagtggat ggagcagttt gagatggcca tctccaacat ctatccggag aatgccaccg
 1501 ccaacgggca tgacttcag atgttctct ttgaggagac cacatcctgc aaggcctgtc
 1561 agatgctgct tagaggtagc tctatcagg gctaccgtg ccatcggtgc cgggcatctg
 1621 cacacaagga gtgtctggg agggctccct catgtggcg acatgggcaa gatttccag
 1681 gaactatgaa gaaggacaaa ctatcgcga gggctcagga caaaaagg aatgagctgg
 1741 gtctgcccaa gatggaggtt tticaggaat actacgggct tctccaccc cctggagcca
 1801 ttggacctt tctacggctc aacctggag acatttgga gctcacgaag gctgaggctg
 1861 aacagaactg gtgggagggc agaaatacat ctactaatga aattggctgg ttcttctga
 1921 acagggtgaa gcctatgtc catggccctc ctacggacct gtctgttcat ctctgttacg
 1981 caggcccat ggagcgggca ggggcagaga gcatcctggc caaccgctc gacgggactt
 2041 tcttggtgcg gcagagggtg aaggatgcag cagaatttgc catcagcatt aaatataacg
 2101 tgcaggtaaa gcacacggtt aaaatcatga cagcagaagg actgtaccg atcacagaga
 2161 aaaaggctt cggggggctt acggagctgg tggagtttta ccagcagaac tctctaaagg
 2221 attgttcaa gtctctggac accaccttgc agttccctt caaggagcct gaaaagagaa
 2281 ccatcagcag gccagcagtg ggaagcaca agtattttg cacagccaaa gcccgctatg
 2341 acttctgcgc ccgtgacctg tcatgctgt cgtcaagga ggttgacatc atcaagatcc
 2401 ttaacaagaa gggacagcaa ggctgtggc gaggggagat ctatggccgg gtggctggg
 2461 tccctgcaa ctactggag gaagattat ctgaatctg ctgagccctg gtgccttggc
 2521 agagagacga gaaactccag gctctgagc cggcgtggc aggcagcgga ccaggggctg
 2581 tgacagctcc ggcgggtgga gacttggga tggactggag gaggccagcg tccagctggc
 2641 ggtgctccc ggatgtgcc tcatatggtt aatttataac acccgattt tctcttggg
 2701 tcccccaag cagacggggg ctcaagggg ttacatttaa taaaaggatg aagatgg

Human Vav Nucleotide Sequence (1-2757)
Figure 11A

1 mnvsywaiwt renasakrkq flclknirtf lsccekfgl krsel feafd lfdvqdfgkv
 61 iytlsalswt piaqngimp fpteesvgd ediysglldq iddtveeded lydcveneea
 121 egdeiyedlm rsepvmppk mteydkrccc lreiqqteek ydtlgsiqq hflkplqrfl
 181 kpqdieiifi niedllrvht hflkemkeal gtpgapnlyq vfikykerfl vygrycsqve
 241 saskhldrva aaredvqmkl eecsqrannq rftarpadga yaassqispp spgagethag
 301 gdgarklrla ldamrdlaqc vnevkrdnet lrqitnfqls ienldqslah ygrpkidgel
 361 kitsverrsk mdryafllldk allickrrgd sydlkdfvnl hsfqvrddss gdrdnkkwsh
 421 mflledqga qgyelfftr elkkkwmeqf emaisniype natanghdfq mfsfeettsc
 481 kacqmllrgt fyqgyrchrcrasahkeclg rvppcgrhgq dfpgtmkkdk lhrraqdkkr
 541 nelglpkmev fqeyyglppp pgaigpflrl npgdiveltk aaeqnwweg mntstneigw
 601 fpcnrvkpyv hgppqdlsvh lwyagpmera gaesilanrs dgtflvrqrv kdaaeafaisi
 661 kynvevkhtv kimtaeglyr itekkafrgl telvefyqqn slkdcfsld tlqfpfkep
 721 ekrtisrpav gstkyfgtak arydfcardr selslkegdi ikilnkkgqq gwwrgeiygr
 781 vgwfpanyve edyseyc

Human Vav Amino Acid Sequence (1-797)

Figure 11B

1 gaattccggg cccggatagc cggcggcggc ggccggcggc ggcggcggc cggccgggag
61 aggccctcc ttacgccct gcttctccc ctgcctgca gtcgagccga gccggcggac
121 ccgcttggg ccgaccctg cccaggccat ggccggcaac gigaagaaga gctctggggc
181 cggggggggc acgggctccg ggggctcggg ttgggtggc ctgattggg tcatgaagga
241 cgccttcag ccgaccacc accaccacca ccacctcagc cccaccgc cggggacgg
301 ggacaagaag atgggtgaga agtgciggaa gctcatggac aagggtgtgc ggttgttca
361 gaaccaaag ctggcgctaa agaatagcc acctatac ttagacctgc taccagatac
421 ctaccgcat ctccgtacta tctgtcaag atatgaggg aagatggaga cacttggaga
481 aaatgagat tttaggtgt ttatggagaa ttgatgaag aaaactaagc aaaccataag
541 cctctcaag gagggaaaag aaagaatga tggagagaat tctcagccta ggcgaacct
601 aaccaaactg tccctcatct tcagccacat gctggcagaa ctaaaaggaa tcttccaag
661 tggactctt caggagaca catttcggat tactaaagca gatgtcgg aatttggag
721 aaaagcttt ggggaaaaga caatagtcct ttggaagagc ttgcacagg ctctacatga
781 agtgcaccc atcagttctg ggctggaggc catggctctg aaatccacta ttgatctgac
841 ctcaatgat tatattcgg ttttgaatt tgacatctt acccgactct tcagccctg
901 gtctctttg ctcaggaatt ggaacagcct tgcgtgaact catcctggct acatggctt
961 ttgacgtat gacgaagtga aagctcggct ccagaaatc attcacaac ctggcagtta
1021 tatctccgg ctgagctga ctgcctggg tcagtggtt attgggtat ttactgctga
1081 tgggaacatt ctccagacaa tccctcaca taaacctc ttccaagcac tgattgatg
1141 ctccaggaa ggcttctatt tgttctga tggacgaat cagaatcct atctgactg
1201 ctatgtga ccaactccc aagaccatc caaagtacc caggaacaat atgaattata
1261 ctgtgagat ggctccacat tccaactatg taaatatgt gctgaaatg ataaggatg
1321 aaagattgag cctgtggac acctcatgt cacatcctg ctacatcct ggcaggaatc
1381 agaaggtcag ggctgtcct tcgcccag tgaattaaa ggtactgaac ccactgtgt
1441 agatccgtt gatcctagag ggagtgagc cctgtgagg caaggagcag agggagctcc
1501 ccccccaat tatgatgat atgatgatg acgagctgat gatactct tcatgatga
1561 ggaattggc ggtgccaagg tggacggc gccttcca ttctccatg cccacaagc
1621 ttccctccc ccggtgccac cagactga cttctgcc cagcgagat gtgtccctc
1681 aagtgctct gctttgaa ctgctctaa ggctgtctt ggctccctc ataaagaca
1741 accattgcca gtacctcca cacttcaga tctccacca ccaccgctc cagaccggc
1801 atattctgt ggagcagaat cccgacctc aagacgccc ttgcttga caccaggcga
1861 ctgtccctc agagacaaac tgcctctgt cccctcagc cgcctggag actcatggc
1921 gcccggcca atccccaaag taccagtac tgcaccaagt tccagtatc cctggacag
1981 aagagaatta accaaccgac actcactcc atttcatg cctcacaata tggagcccag
2041 accagatgt cctaggctg gaagcacgt cagtctgat acctcatga gtatgaatg
2101 cagccatta gtaggccag agtgtacca ccccaaatc aaacctct catctgcaa
2161 tgcatttat tctgtgctg ccagacctt tctgtgcca aaactgccac ctggggagca
2221 atgtagggt gaagaggaca cagagtacat gactcctct tccaggcctc tacggcctt
2281 ggataaccc cagagttcac gagcatgta ttgcgaccag cagattgata gctgtacga
2341 tgaagcaatg tataatatc agtccaggc gccatctac accgagagca gcaccttgg
2401 tgaagggaat ttggccgag cccatgcaa cactgtgcc gaggagtcag aaatgagga
2461 tgatgggtat gatgtccaa agccacctg gccggcgtg ctggccgccc gaactctc
2521 agatctctt aatgccagc cctccttgg ctggtgtct ctggatgtg atctacaac
2581 aaatgtact gaaggtccc aagttcccga gaggcctca aaaccattc cgcggagaat
2641 caacttgaa cggaaagctg gcagctgca gcaaggtagt ggtcctgcc cctctgtgc
2701 caccgctca cctcagctc ccagttagat cgagaacctc atgagtcagg ggtactccta
2761 ccaggacatc cagaagctt tggctatgc ccagaacaac atcgagatgg ccaaaaacat
2821 cctcgggaa ttgtttcca ttctctcc tgcctatga gctacctagc acaccatct
2881 cctgtctgag gtttagagga ccagttagt gggagtatt actcaagtgg cacctagaag
2941 ggaggagat ccttgggtga ctccacagt aagcttgc ctctgttg gatcacat
3001 cagtgttcc aagattcaa agtgggaaa tgaatatga gcagctagta tgtttatta
3061 tttatgggt ctgagtga ttgaagg

Human Cbl Nucleotide Sequence (1-3090)

Figure 12A

005190*026/6560

1 magnvkkssg aggggsgsg aggliglmkd afqphhhhhh lshppctvd kkmvekcwkl
61 mdkvvrlcqn pnvalknsp yildllpdy qhlrtvlsry egkmetlgen eyfrvmenl
121 mkktkqtisl fkegkermeye ensqprnlt klslifshml aelkgifpsg lfqgdtfrit
181 kadaaefwrk afgektivpw ksfrqalhev hpiissgleam alkstidlte ndyisvfefd
241 iftrlfqpw sllrnwnsla vthpgymafl tydevkarlq kfihkpgsyi frlscrlgq
301 waigyvtadg nilqtiphmk plfqalidgf regfylfpdg rnqnpdltgl ceptpqdhik
361 vtqicaendk dvkiepcghl mctscitswq esegqgcpfc rceikgtepi vdpfdprgs
421 gsllrqgaeg apspnydddd deraddslfm mkelagakve rpsspfsmay qaslpvppr
481 ldllqrapv pastsvlga skaasgslhk dkplpipptl rdlppppppd rpysvgaetr
541 pqrplpctp gdcpsrdklp pvpssrpgds wlsrtipkvp vatpnpgdpw ngreltnrht
601 lpfslpsqme pradvprlgs tfsldtsmtm nsspvagpes ehpkikpsss anaiyslaar
661 plmpklppg eqgeseedte ymtptsrvg vqkpepkrpl eatqssracd cdqqidsety
721 eamytisqa lsvaensag egnlatahts tgpeesened dgydvpkppv pavlartrls
781 disnasssf wlsldgdptn fnegsqvper ppkpfprin serkassyqq gggatanpva
841 tapspqlsse ierlmsqgys yqdiqkalvi ahnniemakn ilrefvsiss pahvat

Human Cbl Amino Acid Sequence (1-896)

Figure 12B

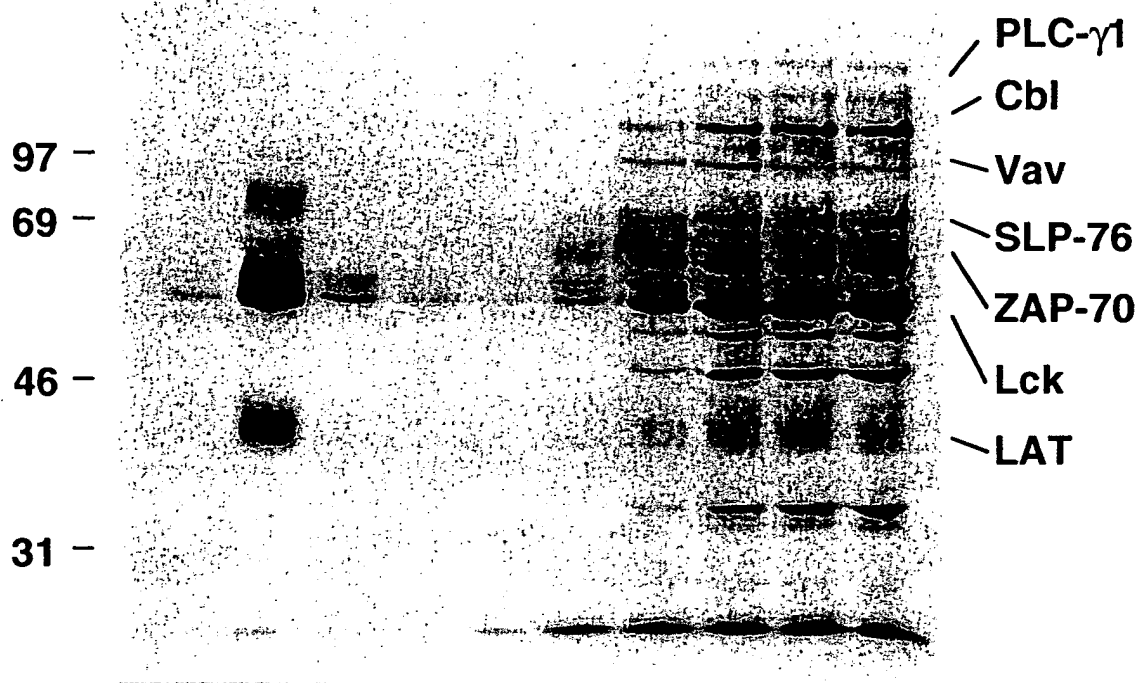


FIG. 13A

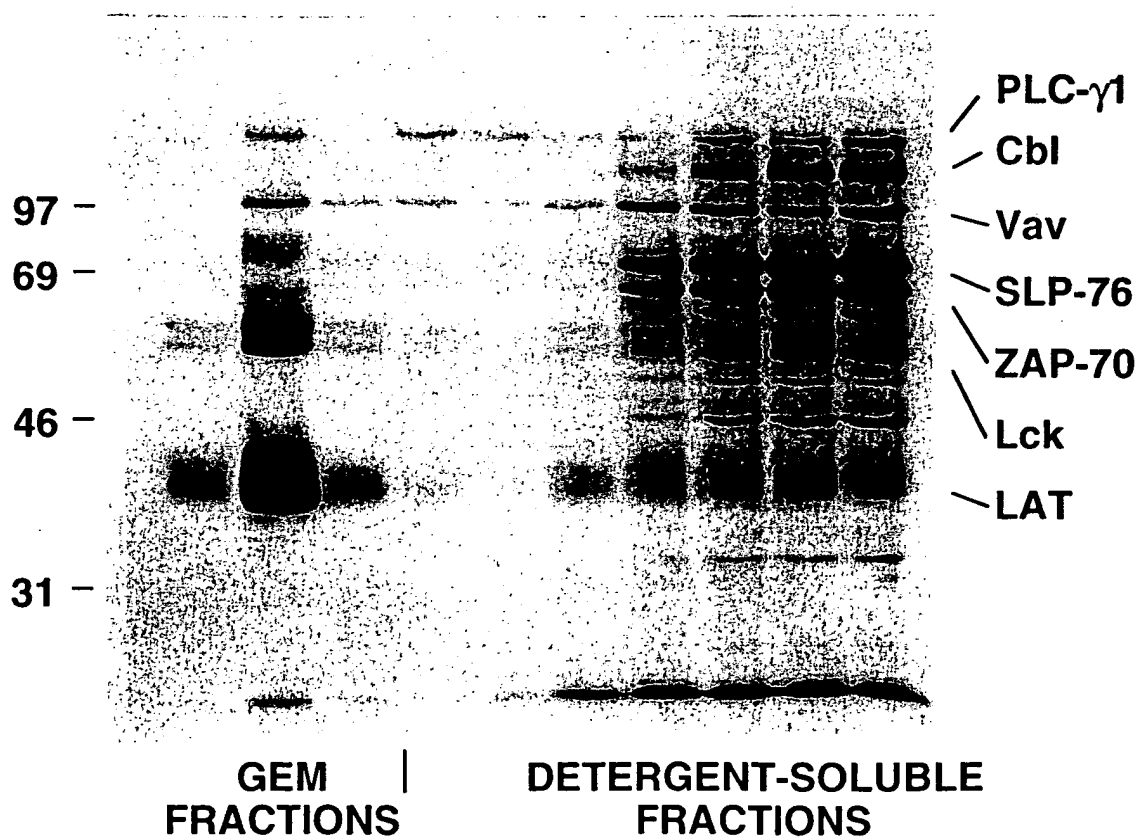


FIG. 13B

006130" 026/550

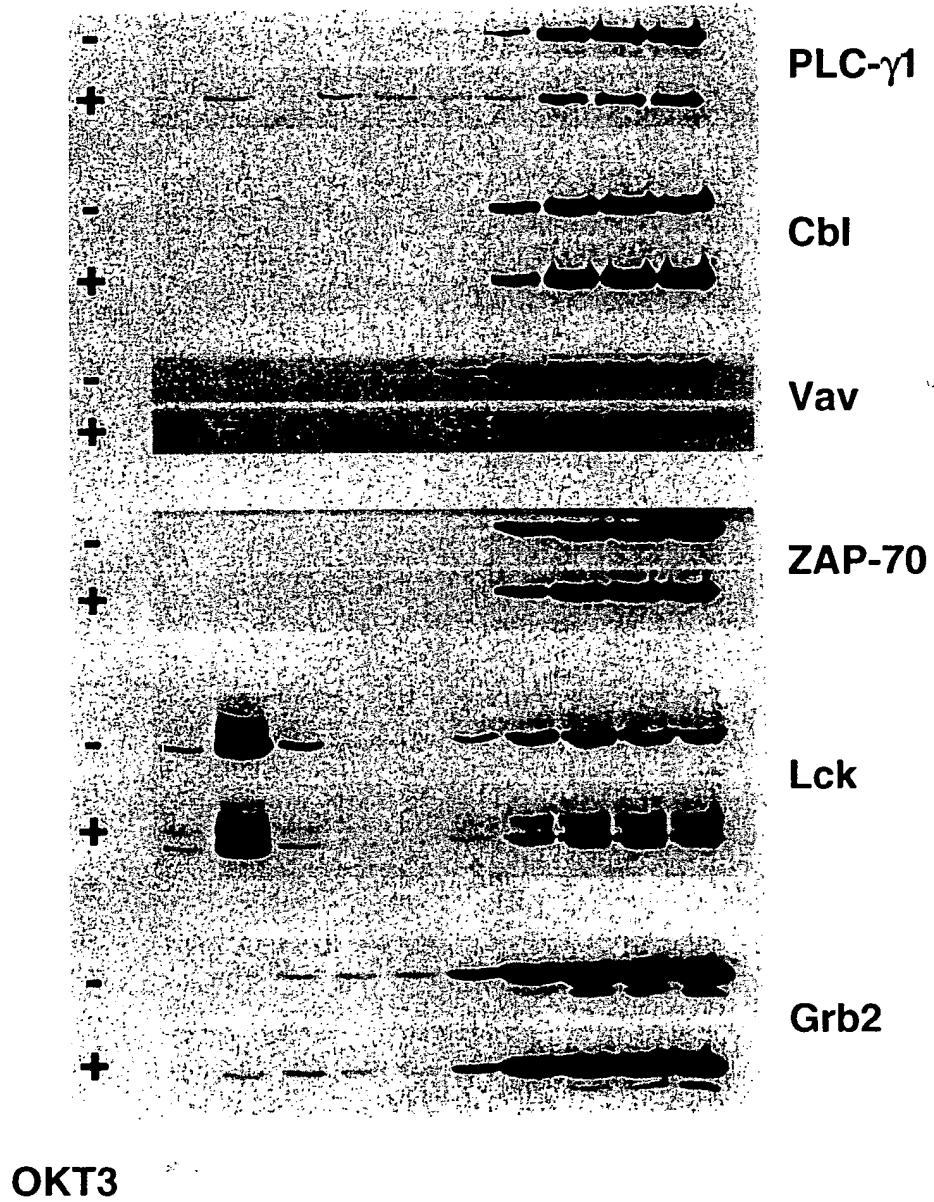


FIG. 13C

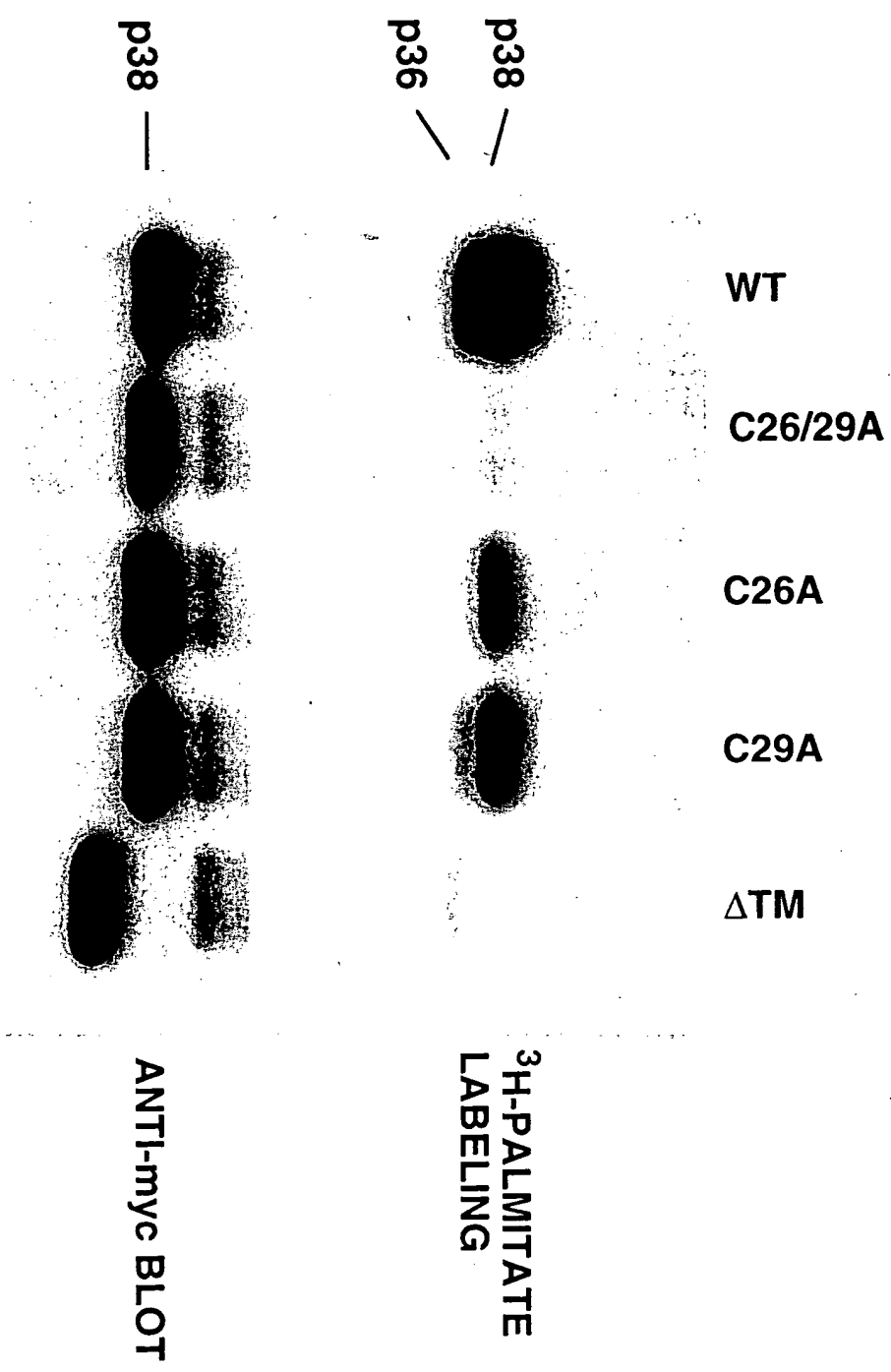


FIG. 14

09597920.001400

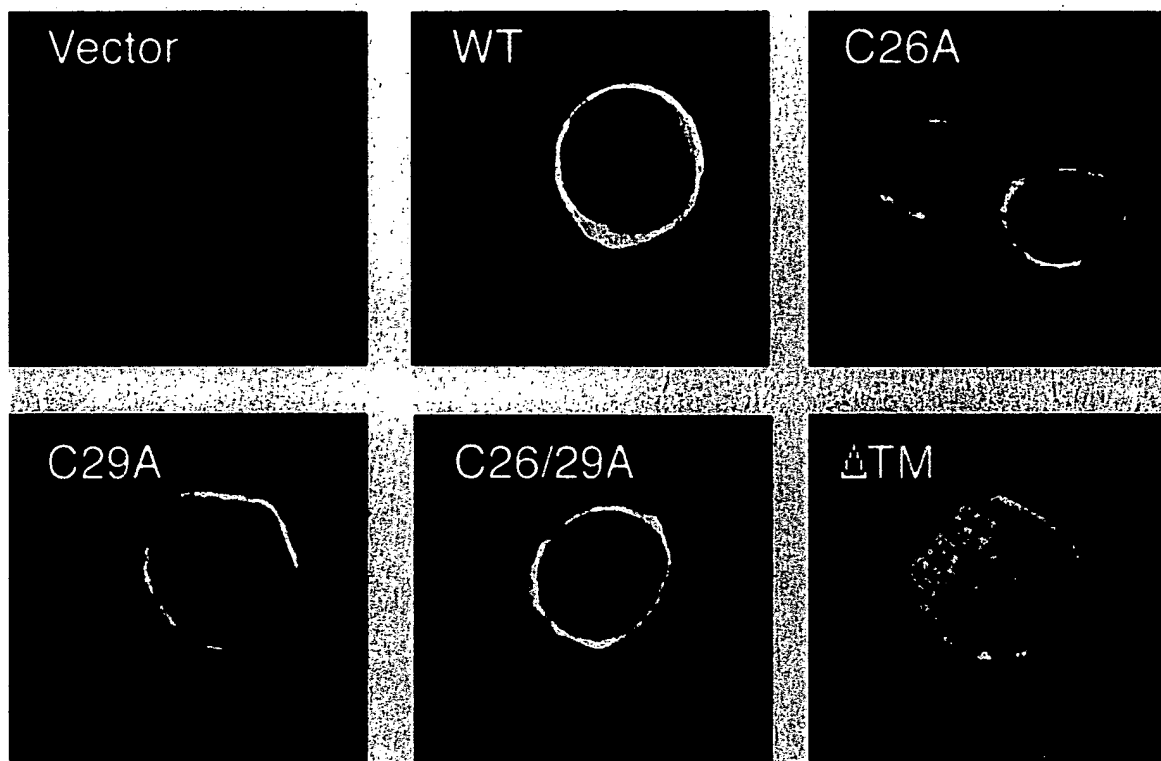


FIG. 15A

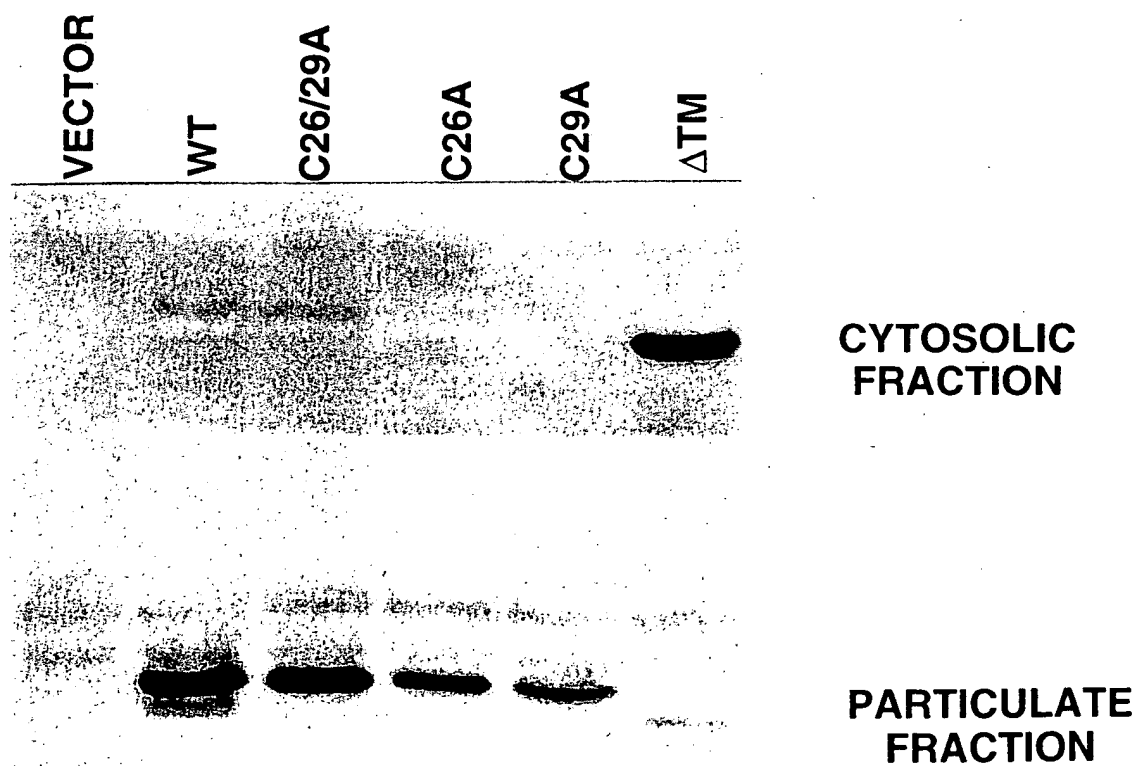


FIG. 15B

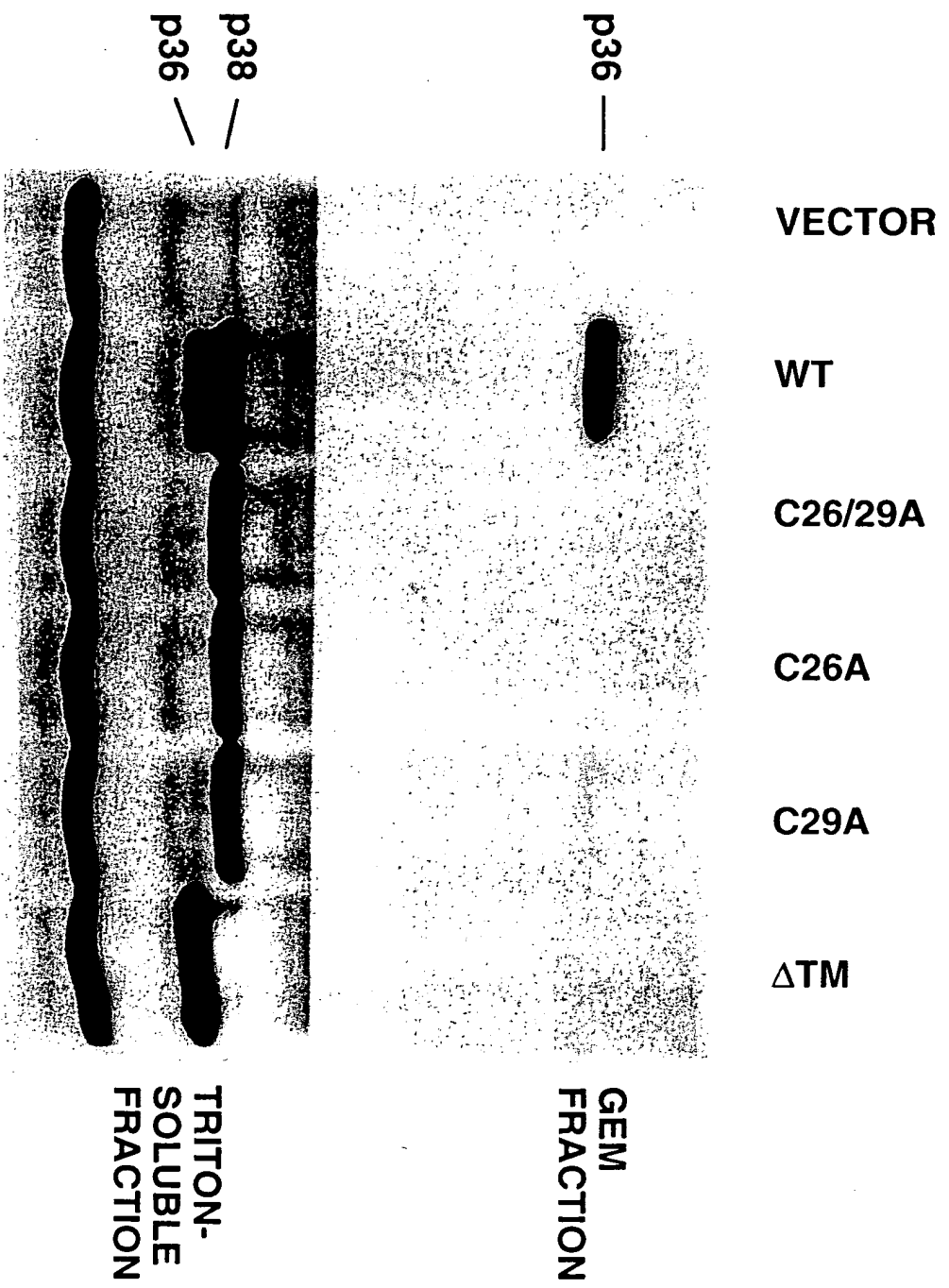


FIG. 15C

09597920.001.900

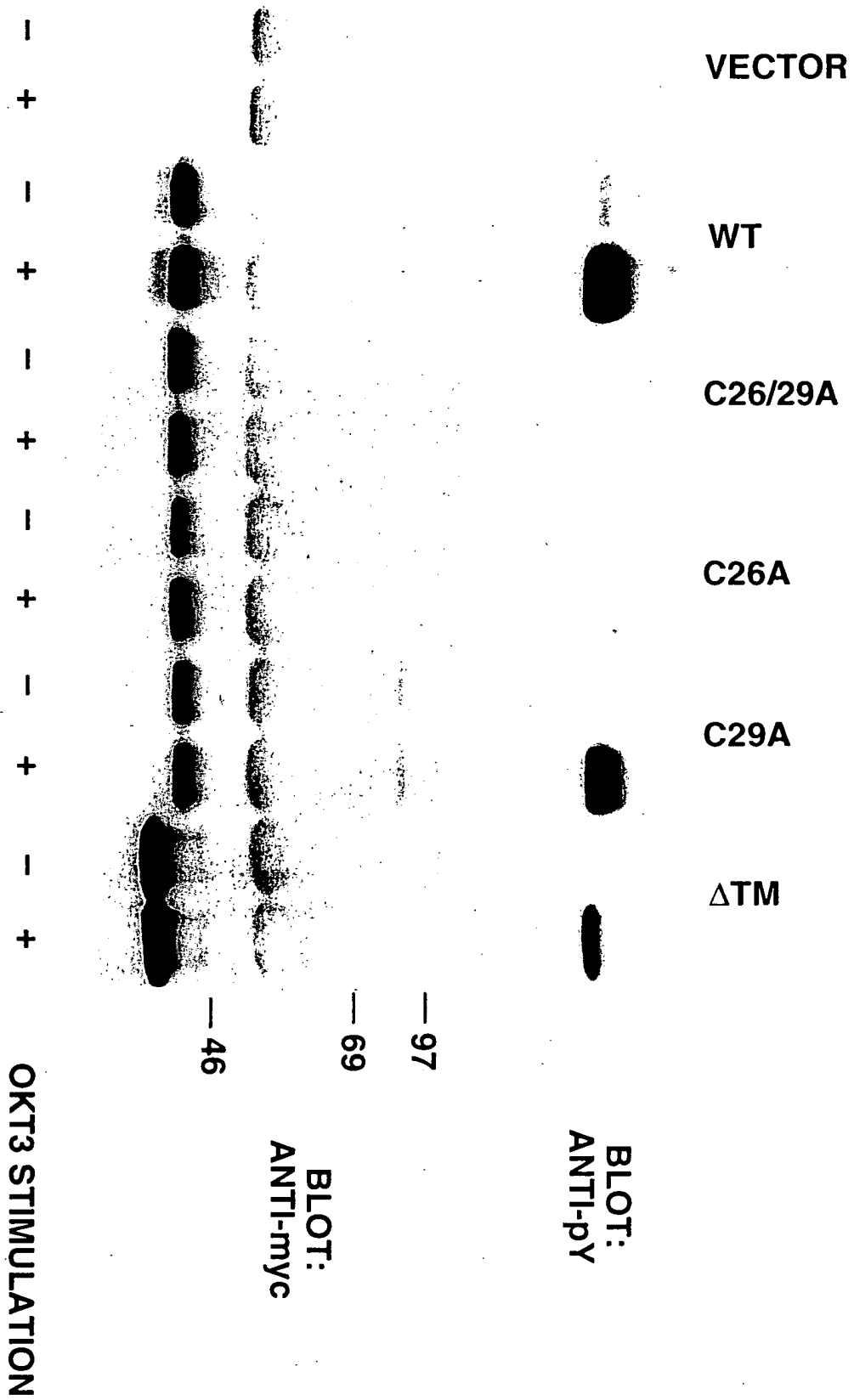


FIG. 16

09597920.001900